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POINTS FOR PLANNERS

LOCAL GOVERNMENT IN ENGLAND AND WALES DURING THE PERIOD OF RECONSTRUCTION (Cmd. 6579 HMSO 4d.)

It is remarkable how widespread has been the welcome accorded by the House of Commons to the timid proposals presented by Mr Willink for the short period reform of local government structure. To use the terms of the Minister's allusion to *Alice Through the Looking Glass*, it marks a definite victory for the 'oysters' (in the shape of National Associations of each type of local authority) and a tactical defeat for the 'walrus', i.e., the predatory Government itself, and for the unspecified 'carpenter', who may be presumed to personify the advocates of regionalism.

The White Paper is concerned almost wholly with problems of structure. As far as the powers and duties of local authorities are concerned, it does no more than remind us that the Government have pledged themselves to centralise the administration of outdoor public assistance and a second batch of trunk roads. It has not yet been able to make the distinction, which Mr Messer so cogently expressed in the House of Commons debate, between national services of a largely technical nature and local services of a human character, in the administration of which the efficacy of local democracy must be strictly preserved. The future of the National Fire Service and the public utilities is still left indeterminate. Finance is scarcely touched at all. There is no mention of the possibility of reforming the methods of local taxation; an overhaul of Exchequer grants, although promised, will be undertaken only 'as soon as the necessary data are available'; and the recent Report of the FitzGerald Committee on *Valuation for Rates* is apparently still 'under consideration'. Yet many authorities are rightly apprehensive of the financial burden which is likely to be imposed on them: (1) by the increased cost of providing existing services; and (2) the cost of making increased provision for education, housing and town planning, to a large extent out of local funds. There is ample justification for the claim that the solution of financial difficulties is no less important than the creation of an administrative structure conducive to efficient government in all parts of the country.

Limiting itself to considerations of structure, the Government has had to answer two main questions: (1) which should come first—the reconstruction of the social services performed by local authorities or the reorganisation of the authorities themselves, many of which are admittedly too small to run these services efficiently; (2) is reorganisation, whether immediate or long-term, to be drastic and to involve the creation of elected authorities larger in size than the area of a County Council, or is it to be confined to structural readjustments within the counties and between counties and county boroughs.

The two questions are not, of course, separate. By deciding to frame their policy for post-war health, education, etc., first of all, the Government has been forced to allocate responsibility for new or extended services to the most efficient of the existing authorities, viz., the county councils and county borough councils, or to joint authorities based on them. Having done that, they now claim—in a circular argument—that as reconstruction plans are now well under way, they will be held up by a major reform in the structure of local government, which cannot be undertaken without a 'full dress enquiry'. Thus,

underlying the policy of the White Paper is an assumption that structural reform should be confined mainly to county districts.[1] Yet in many counties the areas of district authorities have already been tidied up a great deal under the 1929 Act.

The main proposal of the White Paper is to set up a permanent Boundary Commission, of not more than five members, with powers to review the existing administrative areas and to complete and extend the winding up of small and weak authorities which was commenced under the 1929 Act. Although separated from the Ministry of Health, the Commission is to be responsible to Parliament for any recommendation concerning the status or boundaries of counties and county boroughs, and will receive from the Minister general directions as to the size of areas, the marriage of town and country, the creation and extension of county boroughs and the establishment of joint authorities, all of which will require the approval of Parliament. When reviewing the structure of any geographical county, the Commission can be compelled by the county council, by the councils of county boroughs in the area (or of municipal boroughs which are of sufficient size to entitle them to apply for County Borough status), or lastly by the Minister, to direct a local enquiry before reaching a decision. The Commission will be required to submit an Annual Report to the Minister and this will be presented to Parliament.

Clearly there is little sense of urgency and little impulse towards reform behind these proposals. The county/county borough structure cannot be altered without the consent of Parliament, and any regrouping of boroughs and districts may be held up by a local enquiry. The work of the Commission is, in fact, to be circumscribed by legal safeguards, and this is part of a deliberate policy. It follows from what is termed in the White Paper a lack of ' general desire in local government circles for a disruption of the present system '. Presumably the phrase ' local government circles ' refers to the members of local government associations, viz., the ' oysters '. Out of respect for the ' oysters ' the Government appear to have fallen back upon those recommendations of the Onslow Commission which were not, but should have been, legislated upon in 1929, i.e., 16 years ago.

Those who have hoped to find in the Government's proposals a solution of the problems caused by the existence of separate local authorities for town and country will be disappointed. *Ad hoc* joint boards and committees will remain the sole means of securing combined action between the all-purpose county boroughs and their neighbouring authorities, unless special proposals for amalgamation are approved by Parliament. Town and country planning may still be undertaken separately by adjoining urban and rural district councils. In other words the White Paper completely lacks the forward-looking spirit which in 1888 brought county councils into being six years before the final structure of the district authorities within them was determined.

The knotty but vitally urgent problems of Greater London are shamefully avoided. The County of Middlesex, now entirely urban for administrative purposes, will apparently remain substantially as it is. The Commission will have no ' power to entertain applications for county borough status from authorities in this county; nor will the Commissioners have power to extend the boundaries of the L C C so as to create a single administrative unit for Greater London. This is regarded as a matter for special legislation, and the Government ' cannot be satisfied that the present time is opportune '. Finally, London County is to be excluded from the review of the Commission and the allocation of functions between the L C C and the metropolitan boroughs is to be the subject of yet another official enquiry.

J. C. G.

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[1] An assumption which is made explicit in the terms of the resolution upon which the White Paper has been debated in the House of Commons.

DISPERSAL : An Inquiry by the National Council of Social Service (O U P. 3/6).

It is now widely recognised that London is overgrown and its population excessive, and that important social and economic advantages would follow a restriction of growth and a transfer of surplus population. Starting from this basis, which follows the findings of the Barlow Report, a Committee of the National Council of Social Service has conducted an inquiry into the question of dispersing the office staffs of large organisations such as banks, insurance companies, Government departments, etc., as a permanent arrangement and as a contribution towards the problem of relieving congestion in large towns.

The war-time evacuation of office staffs has afforded the Committee an ample field for investigating the problem in its practical aspects, and this exhaustive report shows every evidence of a careful and thorough analysis of the social and domestic implications of a policy of dispersal. No one who has had any experience of war-time staff evacuation can have any doubt of the variety and intensity of the antagonisms which can spring up when number of people accustomed to the amenities and opportunities of a great city are transplanted, without sufficient regard to the social consequences, to the more restricted environment and different way of life of a provincial town, under the stresses of separation fron friends and the breakdown of long-standing associations, accommodation difficulties (especially to those with families) and a cool, or even hostile, reception.

For the dispersal to be successful, it is necessary that the staff transferred should have reasonable assurances of satisfactory housing, educational, medical and cultural facilities, and a prospect of being absorbed into the communal life of the new town with the minimum of friction. This presupposes a clear understanding of the type of town best suited to the purpose, and an appreciation of the important part that the local authority can play, given the right and timely approach, in preparing the way for the transfer and settling in of the " immigrants ".

To those bodies who are contemplating the permanent transfer of their clerical and administrative staffs after the war from the congestions and inconveniences of overgrown cities (especially London) this Report can be recommended as a valuable guide to the best means of overcoming the numerous difficulties involved.

A. L.

THE NEW COCOA SCHEME (Report on Cocoa Control in West Africa, 1939—1943, and Statement on Future Policy H M S O Cmd. 6554 1944 3d)

Before the war, West Africa, like many colonial areas, was seriously subject in its prosperity to the vagaries of the international market for its main export crop—in this case, cocoa. Prices for the producer were at times so low, and appeared to be declining still further, that in 1938 the West African cocoa planters refused to sell their crop. A Commission of Inquiry was sent out and made recommendations. But no action was taken on these before the outbreak of war completely altered the circumstances. Since then, the whole cocoa crop has been purchased directly by the West African Produce Control Board, set up by the Colonial Office, which fixes the price it pays to all producers, and sells the crop overseas at market prices. A substantial profit was made in this way by the Board, which has now agreed to increase the price it pays to producers by 70%.

All this has worked well enough, and provided a certain security for African producers, but, at the same time, the post-war years were looked forward to with a dismay born of the experience of temporary prosperity. The

Government was urged to state its future policy, and it has now done so. It proposes that cocoa should continue to be bought through Government agencies at uniform prices fixed season by season, and sold to world markets by these agencies at current prices. These agencies are to be established by the Colonial Governments and are to act as 'trustees' for the producers. The major part of the approximately £4,000,000 profit made in the cocoa trade during the war is to provide the funds necessary to give steady prices to the growers irrespective of the fluctuations on world markets. Some £1,250,000 of the profits are to be devoted to cocoa research organisation, which is of vital importance for the future of the industry. At the same time, the Government is to go ahead with the development of co-operative societies in West Africa, which, when they are fully organised, will provide a majority of members on the marketing agencies in place of the initial official majority.

There can be no doubt that this scheme represents not only the prospect of continued prosperity for the West African cocoa producer, but also a significant experiment in Colonial policy. The problem of securing a stable price level for the primary producer has been a world concern for many years. For the relatively simple economic situation in West Africa, State control of the producer and the balancing of one year's profits against the losses of another in order to level out price movements, seems the obvious and the most theoretically satisfactory solution. But it is essential that the producers should as soon as possible feel themselves fully associated with the working of the marketing agencies—and this can only be achieved through the growth of a powerful Cooperative movement, in a territory where the small producer predominates. It will be interesting, too, to see if a similar economic technique can be employed in territories where the principal export product forms only a small fraction of world production—West African cocoa production, on the other hand, provides the greater part of total world supply.

B. A. H.

IMPERIALISM TODAY

By Rita Hinden

THE " NEW " APPROACH TO COLONIAL PROBLEMS

It is a commonplace today to talk of the ' new ' approach to colonial affairs. The very marked increase in public interest, discussion and attention given to these matters in recent years is continually being commented on. All shades of political opinion have joined in these discussions, and on certain points there appears, on the surface, to be a remarkable agreement. This is a surprising change from the days when Imperialists and Anti-Imperialists were bitterly irreconcilable. In the past Imperialists looked upon the Colonies either as valuable strategic points in the empire security system, or else as areas of exploitation—sources of cheap raw materials and minerals, based on cheap labour; or outlets for profitable investment. For these reasons they considered British political control to be essential, but as long as ' law and order ' was assured and the most flagrant abuses such as slavery, suppressed, no further claim on their consciences or purses was recognised. The Anti-imperialists, on the other hand, saw imperial domination as the cruellest manifestation of all the evils of capitalism. The abuses in the treatment of the colonial peoples, the denial of political self-expression, aroused them to violent protest; and the connection between the struggle for colonial possessions and war was clearly defined in their own minds. They asserted with vehemence and fervour that international peace was incompatible with the existence of ' colonies ' and called for the ' freedom ' of all colonial peoples.

Today, on the surface, things look different. A Conservative Colonial Secretary is able to propose an expenditure of a hundred million pounds on colonial development, with no dissentient voice being raised from any side—indeed, the political Parties vie with each other in pressing for still more expenditure, a still more effective opening up of the wealth and resources of the ' neglected estates '. All Parties talk of the ' rapid advance to self-government ' and claim to look forward to the day when the British Empire will consist of a large, loose, commonwealth of independent Dominions, at the same time recognising that a mere abrogation of power from the centre will not in itself secure ' freedom ' or wellbeing for colonial peoples. The responsible elements in all Parties recognise that Colonies can no longer be considered the exclusive domain of imperial powers, to do with as they think fit—but that there is need for ' accountability ' to an international authority, whether it be a Mandates Commission to receive reports on ex-enemy Colonies (as under the old League of Nations), or an International Colonial Commission, to supervise and co-ordinate for all Colonies (as perhaps under the new League).

Does this mean that today there is no difference between the Imperialist and the traditional Socialist approach to Empire? By no means. All one can say is that, *for the moment*, the two opposing attitudes have come together on certain points, in much the same way as all political parties have come together on some aspects of home policy—such as social security. Ultimately, the cleavage remains, and inevitable clashes lie ahead. But for the time being, the immediate next steps desired by all, happen in part to coincide. It is at this point that it becomes particularly important for us to understand the forces which have brought about these new attitudes, or we may fall into the error, either of believing that the Imperialists have turned over a permanent new leaf, or else of disbelieving that anything they do can ever be good, and thus automatically

opposing the very policies for which we have struggled in the past, simply because they are now being propounded by our opponents.

What are the forces at work? We have all been influenced by the general trends towards 'integration' in the world, brought about by the advance of modern science and communications. It is no longer possible for small countries to stand alone 'free'—for defence, for economic support, they must inevitably be linked up within some wider framework; and this is as true if they are situated in Europe as if in S. America or Africa or the periphery of the Soviet Union. National sovereignty is no longer in itself the ultimate aim—even the greatest of powers is no longer 'independent', and freedom today depends directly on the political and economic security which derives from association with a broader 'commonwealth' or 'union' of peoples. The cry for the 'freedom' of Colonies must take these inescapable facts into account.

There has, too, been a quickening of the international conscience as regards the dependent peoples. The contrast is strange between the debasement of the standards of morality in Europe since the rise of Hitler, and the tender conscience betrayed by imperial powers when challenged regarding their treatment of native races. But the fact remains that certain international standards have now been laid down and accepted by all the main imperial nations, cutting the ground from under the thoughtless brutal exploitation of earlier days. Particular credit is due to the International Labour Office—and the Mandates Commission, for all its shortcomings—for the stirring of the world's conscience in this respect.

But beneath these material and moral factors, there are new economic forces at work, which are almost unconsciously colouring and determining our approach. To understand this, we must go back a few generations to the days when Socialist writers first analysed imperialism on the basis of the economic facts of their time. The economic facts have changed since then; and it would be surprising if the attitudes of Imperialists and Anti-Imperialists alike, which grew out of these facts, had alone remained rigid and immutable.

HOBSON'S ANALYSIS OF IMPERIALISM

The classic British work on Imperialism from the 'anti-imperialist' angle is Hobson's famous book[1] published in 1902. Hobson's analysis was adopted by Lenin in his own small book on Imperialism,[2] which appeared in 1917. Lenin dotted a few i's and crossed a few t's, but in essence he accepted the argument. Nothing else of fundamental importance has appeared to shake this analysis, and for two generations the socialists of Britian have built up their own political approach to the problems of Imperialism, starting always from Hobson's own angle.

Hobson's analysis sprang directly out of the circumstances in Britain at that time. In 1900 Britain was the greatest creditor country in the world. The value of her overseas lending had increased with extraordinary rapidity during the 19th century. Although her exports were considerably less than her imports, she derived so large a revenue from her 'invisible exports' of shipping and trading services and from interest accruing on overseas loans, that she was left with an extensive surplus for foreign and colonial investment.

Not only that, but the great growth in industrial capacity and capital accumulation which marked the 19th century in Britain had been unaccompanied by corresponding increases in the purchasing power and standard of living of the mass of the British population. This was before the period of heavy direct taxation and social services. In Britain the *laisser faire* vision of the state still

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[1] *Imperialism: A Study*, by J. A. Hobson. London. 1902.

[2] *Imperialism, the Highest Stage of Capitalism*, by V. I. Lenin. First Russian Edition, 1917.

predominated, with the result that gross inequalities of wealth were allowed to develop, the expansion of the home market was stunted, and manufacturing capacity and surplus capital looked for their outlets overseas rather than in the development of the home market.

These were the facts of Hobson's world and his analysis of imperialism is based directly on them. The theory he elaborated may be summed up as follows :

(a) The colonial empire is of illusory value as an outlet for trade.

(b) It is even more barren for settlement than for trade.

(c) What then are the forces making for imperialism ? The value of foreign investment is of much more importance than the profits of foreign trade. If the manufacturing and trading classes make little out of Colonial markets, it is quite otherwise with the investor. In 1899 the income of Great Britain from commissions on foreign trade was estimated at 18 million pounds, i.e., 2½% of the turnover of 800 million pounds. Only when we set beside this sum 90 to 100 million pounds, representing pure profit on investments, do we understand where the economic impulse to imperialism is derived. Great Britain was becoming a nation living on open tribute from abroad. The investing classes, and their allies (the Civil Service, the armed forces, the financiers) use the State for their own purposes and the whole foreign policy of Britain had become primarily a struggle for investment and trading outlets.

(d) This has arisen because of the internal economic position in Britain. The power of production had outstripped the rate of consumption and new investment had to be found for the increasing savings of the rich. ' It is not industrial progress that demands the opening up of new markets and areas of investment, but maldistribution of consuming power which prevents the absorption of commodity and capital in the country.'[1] Over-saving, which is the economic root of imperialism consists of rents, profits, and other unearned income. If this became higher wages or taxes for the good of the community, there would be no need for imperialism. If there were proper distribution of income, there would still be need for foreign trade in goods, better produced overseas, but ' the pressure would be the wholesome pressure of the consumer anxious to buy abroad what he could not buy at home, not the blind eagerness of the producer to use every force or trick of trade or politics to find markets for his surplus goods '.[2]

Social reform is therefore the answer to imperialism: the home markets are capable of indefinite expansion. ' Trade Unionism and Socialism are naturally enemies of Imperialism for they take from the imperialist class the surplus incomes which form the economic stimulus of imperialism.'[3]

(e) The white administration of the colonial peoples is in no way directed to the benefit of these peoples. ' Considerations of present order are paramount, and industrial exploitation of the land and labour under private management for private immediate gain is the chief operative force in the community, unchecked or inadequately checked, by imperial or other governmental control. The future progress of the lower race, its gradual education in the arts of industrial and political self-

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[1] *Imperialism*, by J. A. Hobson. Revised edition. 1905. P. 75.
[2] Op. Cit., p. 77.
[3] Op. Cit., p. 80.

government, in most instances do not at all engage the activity of the imperial government, and nowhere are such considerations as welfare of the governed really paramount.'[1]

LENIN'S DEFINITION

As we have said before, Lenin added little to this. He formulated this definition:

> 'Imperialism is capitalism in that stage of development in which the domination of monopolies and finance capitalism has taken shape; in which the export of capital has acquired pronounced importance, in which the division of the world by the international trusts have begun; and in which the partitioning of all the territory of the earth by the greatest capitalist countries has been completed.'[2]

He also stressed the connection between imperialism and war.

> 'Imperialism has grown from an embryo into a dominant system; capitalist monopolies occupy first place in national economics and politics. The partition of the world has been completed. On the other hand, in spite of an undivided monopoly by Britain, we see a few imperialist Powers fighting among themselves for the right to share in this monopoly and this struggle is characteristic of the whole period of the beginning of the 20th century.'[3]

. . . .

To sum up. In the period leading up to the last war, imperial development was desired by certain British interests because the growth of productive capacity and surplus capital had been so extensive that it could find no outlet in the low standard of purchasing power at home. Once these interests in overseas trade and investment were established, they were powerful enough to use the machinery of the State to further their ends, if necessary by military operations. A whole network of subsidiary trades and professions—Army, civil servants, financiers—developed, all with a vested interest in imperialism. These interests opposed social reforms at home, which would take from them their surplus incomes, on which the whole imperialist drive was based. Thus the standard of living at home remained low while the energy of the State was concentrated on supporting overseas interests and ventures. At the same time, the people in the Colonies were kept in a state of oppression, and used as reservoirs of cheap labour in order to produce the cheap products which would make investment and trade more profitable. To maintain this state of affairs, Imperialist nations were constantly being embroiled in military operations leading to major wars.

On such an analysis, imperialism was a wholly pernicious development to be opposed from every point of view.

BRITAIN'S CHANGED ECONOMIC SITUATION

Today, forty years later, Britain's economic positon has undergone a fundamental change. Far from being the greatest 'surplus' country in the world, Britain is faced with grave difficulty in maintaining any equilibrium at all in her balance of payments. Overseas lending had been declining for some time before the war; but since the outbreak of war there has been a process of disinvestment, or the actual selling of overseas investments, which has reduced

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[1] Op. Cit., p. 248.
[2] *Imperialism*, by V. I. Lenin (Martin Lawrence, 1933), p. 81.
[3] Op. Cit., pp. 97–98.

these from about £4,000,000,000 to about £2,000,000,000. This means a sharp decline in the interest payments received from abroad. There has also been a falling-off in the income from shipping and commercial services, and a steep drop in exports.

Today there is no súrplus capital in Britain looking for investment outlets. If Britain is to maintain her balance of payments, and if she is to have any hope of becoming an overseas investor again, the only method is to increase exports, or to diminish imports. The possibility of reducing the quantity of imports has exercised many economists but it is generally agreed that Britain cannot do this without a severe reduction in her standard of living. Today, such a reduction would simply not be politically feasible in Britain. The whole conception of a reasonable standard of living and the right to benefit from social services of every kind, has radically altered since the days when Hobson wrote. No political party in Britain could suggest a cut in any of these, except as a wartime measure. Indeed, the whole policy of social reform at home now engaging the British Parliament is designed to *increase* social services of every sort—health, education and social insurance—and to release more and more consumers' purchasing power by the more equal distribution of income through increasing taxation. To cut down imports is therefore impossible. The social reforms now accepted as essential by all Parties can only be achieved if Britain increases her export trade.

The attitude towards exports has therefore undergone a radical change. Exports are no longer needed as an outlet for surplus productive capacity as they were forty or fifty years ago. Nor is there still the unhappy approach of the 1930s, based on

> ' the fallacy which influenced the theory and practice of many countries between the two wars, that imports were bad because they reduced employment at home, and exports good because they encouraged it. This was the " bad neighbour " policy of " exporting unemployment " instead of absorbing it in production for home consumption or home investment, which caused so much economic havoc in the 1930s.'[1]

The attitude today is that exports are needed in order to purchase imports so as to keep up our own home standard of living. This is well summarised in the following paragraph:

> ' Britain's new economic situation in the world, therefore, demands a new attitude to exports. Before 1914 Britain enjoyed so large a margin in her balance of payments that fluctuations of her total exports in relation to imports were not of vital consequence; they meant only a little more or less capital available for investment abroad. Between the two wars exports were thought of mainly as providing employment; they were therefore good and desirable in themselves. Both these attitudes must now be discarded. Britain needs to export, not as a cure for unemployment—if that were all we could find plenty of productive work for all requirements, but as the main, if not the sole, valuable means of payment for imports.'[2]

In other words, we have arrived at the position which Hobson recognised as desirable forty years ago:

> ' The pressure would be the wholesome pressure of the consumer anxious to buy abroad what he could not buy at home, not the blind eagerness of the producer to use every force or trick of trade or politics to find markets for his surplus goods.'[3]

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[1] *The Times*, 25/1/44. Article on ' Britain's Foreign Trade.'
[2] *The Times*, 26/1/44. Last of three articles on ' Britain's Foreign Trade '.
[3] *Imperialism*, p. 77. Quoted above.

DIVERGENT INTERESTS AMONG BRITISH CAPITALISTS

Britain's economic necessity of the present day, which has sprung out of her policies of social reform at home, and also out of her changed economic position in the world, suggests, therefore, a new and very different attitude to Colonies. As we have seen, overseas outlets are no longer desired only as a refuge for surplus capital and products, or to bolster up the profits of a few sectional interests. They are needed to maintain the standard of living of the British people. Full employment policies and the development of social services at home make it impossible now to reduce the volume of imports to any considerable degree; and the only way of being able to pay for imports, our position regarding investments being as unfavourable as it is, is to expand exports. In order to expand exports, an increased standard of living in colonial areas is highly desirable. In other words, the Colonies are no longer to be used merely as sources of cheap labour and cheap raw materials; they are even more urgently needed as markets for British exports. For this, a new attitude towards Colonies has become essential, and is indeed taking place. The Colonies must be developed, in part industrialised. Britain has noted the increasing value of the trade with primary producing countries which have developed some degree of industrialisation—such as the Dominions and Latin America. This is the ideal to be followed in the Colonies too.

Does this imply that there is no longer need for doubts or suspicions regarding British economic activities overseas? Do Britain's own interests now automatically involve a progressive policy towards her dependencies? Can colonial development now be left safely in the hands of the Colonial Office? This is by no means the case. It is undoubtedly to the general interest of the British public to encourage a higher purchasing power in the Colonies, and for the time being this interest coincides with the interests of British exporting firms, but there continue to be other interests at work in Britain, whose desire will still be to continue the exploitation of the Colonies along traditional lines. In other words, the British capitalist classes have conflicting interests in this matter, and there is no guarantee which section will, in the future, have the stronger influence. The sectional interests who will wish to continue the exploitation of the Colonies are the big mining companies whose strength and profits lie in the cheapness of the labour they can use; the plantation companies who similarly base themselves on cheap native labour; the trading companies who purchase raw materials as cheaply as possible in order to make a high profit on their trade; the British investors in colonial loans which yield a higher rate of interest than British Government stock. These interests are all strong and active, and their profit is bound up with a continuation of the old backward colonial conditions.

Even among the British exporting firms, there will be a division of interest, according to the source of their raw material supplies. Cheap raw materials are essential for British industry if it is to maintain its own in overseas markets. If an industry bases itself on raw materials derived from a Colony, it will naturally wish to have that raw material as cheaply as possible, and its attitude will be determined by the relative importance to it of the Colony in its role as a supplier of raw materials compared with its role as a market for the finished product. On the other hand, those British exporters who derive their raw materials from home or foreign sources, and produce the type of commodity which may find important outlets in the Colonies will press for the maximum of colonial development and the maximum increase in colonial purchasing power.

It is clear therefore that there will be interests among British capitalists, tugging in different directions. It is even conceivable that there will be those who will attempt to solve the whole difficult position of maintaining the volume

of British imports by reducing the price of these imports, and so succeed in acquiring the goods needed to maintain the standard of living in Britain in exchange for a *smaller* volume of exports sent abroad. At the moment, stress is not in this direction—it is all in the direction of expanding the export trade. But we must take into account the possibility that if the export drive proves unsuccessful, there will be many powerful forces inside Britain, including the *British consuming public*, whose interest will be better served by calling for cheaper imports. There will then be a drive, as far as Colonies contribute to our imports, to maintain as *low* a standard of living as possible in the Colonies, so that we may continue to purchase from them our necessary supplies of tea, cocoa, coffee, rubber, tin, copper, sisal, palm produce and the rest, at as low a cost to ourselves as possible.

We, as socialists, must reckon with all these varying forces at work and recognise the limits of the present favourable trend. The most we can say with confidence is that *today* there are powerful forces at work in Britain which demand a policy of colonial deveopment. These are, in the first place, the interests of the British public, demanding that there should be no reduction in the standard of living at home, and beginning to understand that this can best be achieved if there are high standards of living overseas, so that people there can purchase British exports. In so far as the Government is influenced by the demands of the consuming public, it will also press for a rising standard of living in the Colonies. And not only will the general public demand this, but also many of the export industries. There will be—indeed, there already is—strong capitalist support from certain angles for a policy of colonial development, and the British Government will feel strengthened in the steps it takes in this direction. At the same time, we must recognise that there will be a division of interest among the British capitalist classes, between the investor in mines, plantations or trading companies on the one hand, and the exporter of commodities on the other—and even among exporters there will be those who find greater profits in securing cheap raw materials from the Colonies than in developing them as export outlets. We cannot therefore *rely* on a policy of colonial development, in the sense that we want it, springing automatically from the British Colonial Office. In the years to come, the Colonial Office will veer from one side to another, according as the different interests at home rise to the ascendant. For the moment, however, the stress is all on the expansion of exports. This can be used to further the policies that we desire. There is every reason to hope the tide will flow in our direction in the coming years, and that we will receive support from what would formerly have appeared unexpected sources.

THE MODERN CONCEPTION OF GOVERNMENT

Not only is there this switch-over in economic interest, tugging governments in new directions; but the whole conception of the role of governments has undergone a change. Governments are now no longer looked upon as *laisser faire* agencies, and the conception of the State has advanced far beyond that of the police state. The British conception of the State today is of an interventionist welfare agency; responsible for social services; for improving the standard of living in all sorts of ways; and for regulating, in a large measure, trade and industry.

This conception of the State has spilled over into the Colonies as well. Colonial governments have all the defects of bureaucracies, but under the pressure of new ideas and new influences, they have begun to make moves in the right direction. The emphasis has shifted from maintaining order in the interests of outside exploiters—as was indeed the case in the days of Hobson—towards taking active steps to relieve the poverty and misery from which all

colonial areas suffer. They have seen it as essential to expand social services in the Colonies as far as they could with their limited resources; to regulate in some degree the economic life of the country; to encourage some means of political expression among the people; to protect the people in some measure against outside monopolists; and to prevent the most crude forms of exploitation of labour. They are also beginning to undertake the positive tasks of fighting against the hostile natural conditions of the tropics. In this new approach, strong British interests are in close harmony; and it is possible to canalise some of the power and the wealth of the Imperial Government, and through it of the colonial governments, in the direction of a very real attack on colonial poverty and a very real betterment in the economic conditions of colonial populations.

PRACTICAL CONCLUSIONS

What are the practical conclusions which emerge from this analysis?

(a) There lies immediately ahead a period of great formative possibilities in colonial development, in which the British Government, under the stress of new economic circumstances, will probably be moving in the very direction which we, as socialists, want, and in which it may prove possible to secure far-reaching progress.

(b) Nevertheless, there remain dangers from the opposing interests of certain sectional groups, so that a policy of critical vigilance will be just as necessary in the future as in the past.

(c) However willing the British Government may be to secure advances in the coming period, its plans will not proceed along anything like socialist lines unless there is constant pressure to this effect. Earnest attempts will be made to solve the problems of colonial poverty, and to overcome the physical disabilities of the tropics. But the tendencies of governments will be to effect these developments, as far as possible, along the old lines of private enterprise. It will thus be incumbent on socialists to follow the new activities with close and detailed attention so that they may be for the general welfare of colonial peoples, and not for the benefit of sectional interests, whether in Britain or on the spot.

(d) At the same time, it should always be to the forefront of our minds that the best safeguard against possible future reaction is the growth of the independent political and economic institutions of the colonial peoples, so that they themselves will be able to stand firm in their own interests.

THE BRITISH MACHINE-TOOL INDUSTRY

A Memorandum by L. A. Ferney

GIVE US THE TOOLS AND WE WILL FINISH THE JOB

Machine-tools are power-driven appliances for the precise shaping of metal parts from either rough castings, forgings or rolled sections (e.g., bars) by cutting away excess metal. This is a classical definition which excludes wood-working machinery, forging and casting machines and presses. 'Machining' thus defined is but one of the three methods used in the engineering industry for the production of finished or semi-finished goods. The other two are 'fabrication' and 'assembly' (or 'fitting'). Fabrication includes the various methods of manufacturing articles by altering the shape of metals and fastening different parts together; examples of this are pressing, forging, and welding. Assembly means fastening together standard parts, for example by hand fitting, screwing together.

Nowadays there is hardly any finished engineering article which is produced entirely by one alone of these three methods; at least two, and usually three, are used in the making of articles at all complicated in structure. The key process in engineering production is machining. The machine-tool industry is therefore of considerable importance. Judged by the capital invested in it, the value of its output, or the numbers employed in its firms, the industry occupies only a modest place in any national economy. Only five countries in the world possess what might be properly called machine-tool industries, namely the U S A, Germany, Great Britain, U S S R, and Switzerland, and three others (Czechoslovakia, Sweden and Belgium) each have a number of machine-tool building factories. Even in the first countries the proportion of total industrial effort devoted to machine-tool building, including the capital invested and the numbers employed, is relatively very small. In the United Kingdom, for example, machine-tool output was valued in 1930 at approximately 0.2% of total industrial output. The capital invested was about £7½ million and the number of workers employed was 0.3% of the industrial population. Comparatively speaking, the value of total output was rather less than that of the lace industry or of the aerated water industry. In addition the relative importance of machine-tools in engineering has declined considerably during the last fifty years in favour of fabrication. Whereas in 1890 70% of the man hours devoted to engineering manufacture might be spent on machining, 30% on assembly and none on fabrication, the proportions may be 50%, 10% and 40% today. Notwithstanding the considerable development of technique over the same period, machining is still a more laborious and expensive method of production than is fabrication. It is valued for its greater accuracy. In this respect, 'pressing' approaches the accuracy of machining and on account of this and of its high productive capacity, pressing will be included in this brief survey.

Despite its decline in recent years the machine-tool industry is of supreme importance to this and any other country. The function of machine-tools is to convert rough metals into goods which can be used such as machines, armaments, munitions, vehicles, engines, etc. The industry is the only one which uses and consumes its own products. It is the true home of precision and skill among the engineering trades. It is a school where good craftsmen are bred. It is á trade which beats ploughshares into swords and vice versa. A powerful and well-organised machine-tool industry enables a country to switch

from one type of engineering production to another quickly and on its own resources. It acts as a kind of leaven for the engineering trades of each country.

No nation can wage a total war without machine tools nor can an industrial country hope for a prosperous peace without means of producing them. They are essential to an expansion of output. The spectacular rise in the production of American war supplies is based in the first instance on the U S A's possession of an enormous and well-equipped machine-tool industry, the output of which has grown from $200 million in 1936 to $1,400 million in 1942.

Expansion of output in the German machine tool industry began in 1933 largely as a result of the rearmament policy of Hitler who introduced a number of tax reforms in order to encourage the modernisation of German industry and the growth of the machine-tool trade. Whilst before the war the German industry was only half the size of the American one, in 1937 it exported nearly 20% more.

HISTORY OF THE MACHINE TOOL TRADE

England and America between them have been responsible for most technical developments leading up to the modern machine-tool.

The boring machine, the lathe and the shaping machine, known as the primary machine-tools, all originated in England So, too, the other general machine-tools such as the planer, the steam hammer and standard taps and dies. Wilkinson invented the boring machine in 1774, thus making it possible for Boulton and Watt to build their steam engines. Maudsley, the greatest of early tool builders, developed the screw cutting lathe (1797), the slotter and the planer. The latter was fully developed between 1817 and 1820 by Roberts and Clement. Nasmyth invented the steam hammer in 1837. Somewhat later in the century, Whitworth completed the work on primary and general machine tool development and standardised screw threads.

Americans began making machine tools at the break of the century, their contribution being mainly in the field of special machine-tools and in methods of manufacture. Thus Whitney first made known the principles of interchangeable manufacture in 1808 and built the first milling machine in 1818. Both Whitney and North, his contemporary, were arms manufacturers and the great impetus to machine-tool building in the U S A came from military requirements.

Acceptance of the principle of interchangeability was the first step towards mass production and also towards scientific management. In all three America has been a leader; and as far as machine-tools are concerned, it can be said that here too she has been in the lead since the end of the last century. This is mainly due to the work of such pioneers as Norton, Pratt and Whitney.

We must make it clear at this stage that the development of a new type of machine-tool is a major human opus, equivalent to, say, the writing of a great opera. There is this difference, however, between an opera and a machine-tool: an opera once written does not have to be brought up-to-date periodically—a machine-tool must, otherwise it will be displaced by more modern types Many machine-tools, some automatic lathes for instance, may take a quarter of a century to reach a stage of comparative perfection, yet almost every years sees further improvements in their design or methods of manufacture.

The German machine-tool industry was born rather later—sometime after the Franco-Prussian war, Germans had already been skilled craftsmen and metallurgists for many centuries; but it was their victory in 1870–1, coupled with the large financial contribution exacted from the French and the discovery of a new process of making steel from a poor Lorraine ore, which laid the

foundations of modern German industry, and established a demand for large quantities of new tools, which the Germans began to build themselves. At the end of the century the Germans had a considerable machine-tool industry. By 1910 it had surpassed the British industry in size and had produced many splendid types of machine. The war of 1914–18 inspired the equipment of what was probably the greatest engineering industry the world had ever seen, and this was carried out by the German machine-tool trade almost single handed. The war thus offered a good object lesson.

Defeat in war did not affect the industry adversely in the long run, as between 1923 and 1928 Germany embarked on a vast programme of rationalising industry, mainly on borrowed money, and gave vast opportunities for the further development of the machine-tool trade. Also, from 1923 right up to 1939, orders for machine-tools with which to re-equip Soviet Russian industry were plentiful. On the average, Germany supplied half the Russian imports of tools. The money value of these orders exceeded £3,000,000 in some years. To Germany the benefits of the Russian trade were two-fold : it provided a useful and quite lucrative ' base-load '; and since the Soviet authorities were very discriminating buyers, the German machine-tool trade was forced to standardise its allignment charts (Professor J. Schlesinger), improve the quality of output and also reorganise its methods in order to ensure the prompt deliveries required for vast quantities of machines. The most recent incentive to expansion was given by Hitler in the period 1933–8, when once more the German industry was equipped for war.

We have seen how closely the machine-tool trade has been allied to wars in the three principal countries in which it has grown: it seems to live by wars, and wars seem to live by it.

The development of the Swiss machine-tool trade which is much smaller in size, proceeded on different lines. Switzerland is the acknowlegded home of watch-making, a trade which requires an accuracy in manufacture surpassing even that needed for machine-tools. With the rise in demand for good, mass-produced watches, there naturally arose a need for machines precise enough to make extremely accurate watch parts cheaply on a large scale. The Swiss applied themselves to this with that scientific care on which was based their watch. Within several decades they created a range of high-precision automatics. They also went further, and in order to build these automatics economically they developed super-precision machines for the building of such automatics. Here we must mention the jig-boring machine of which the best known example was that built by the *Societe Genevoise pour les Instruments de Physique*. Firms such as this were able to produce not only very accurate machine-tools but also high-precision instruments; these, in their turn, facilitated the mass-production of electric meters and other instruments, e.g., speedometers which are nowadays required in vast numbers, and which require accurate machine tools of the same type as the watch-making industry. In certain lines of these high-precision automatics, the Swiss have enjoyed a monopoly for many years, and have maintained it by the excellence and low prices of their products. In other words, no other country could produce this class of machine as economically as the Swiss.

STATISTICAL DATA

Britain. In 1936 the British machine-tool trade had a capital of approximately £7,500,000 and the value of its annual output was approximately the same amount in an average pre-war year. This annual output is in value about 0.2% of the output of all British industries, 1½% of the output of the engineering industry and 5% of that of the mechanical engineering trade. Preparations for war have sent up the figure for total output with amazing rapidity. By 1939 it had risen to £19,000,000, and by 1942 to £47,000,000.

The industry employed some 20,000 people in a normal pre-war year, i.e., about 0.3% of all industrial workers, 2% of engineering workers and 4% of the mechanical engineering workers.

The average weekly output per person employed was not high—about £7, which is 10% less than that for the engineering trade as a whole. The trade is very susceptible to trade cycles and total output, cost per ton and employment are all affected. One-third of the trade is concentrated in the Birmingham-Coventry area, one-quarter in and around Manchester, and one-fifth in North East Yorkshire (in the Halifax-Keighley neighbourhood). Of the remaining 22%, half is to be found in Scotland and half in the London area.

The American machine-tool industry employed in peacetime about three times as many people as our own and had a very much higher average weekly output per person per week.

German output was approximately twice as high and Swiss output about half as great as that of Britain.

THE TECHNICAL POSITION OF THE TRADE IN THE UNITED KINGDOM UP TO 1938

As compared with other machine-tool producing countries the U K had no large-scale producers of tools except one or two firms such as *Alfred Herbert, Ltd.*, and *Craven Bros., Ltd.* The former firm had a capital of £1,000,000 and employed perhaps 2,000 men in its shops, a considerable proportion of these being engaged on the production of small tools, dieheads, etc. Craven's employed about 800 men.

In the nature of things the larger producer of machine-tools will not only manufacture more economically but will also possess the necessary equipment and personnel for the development and production of high-class tools. It must be remembered that the development of an entirely new type of machine such as a multi-spindle automatic, may take several years and cost £50,000 in the design stage and a further £100,000 for jigs and tools to ensure that it is produced economically in quantity.

The bulk of the British firms are private, old-established firms, where the management has not been appointed but inherited on the one side, and on the other there is ' rugged individualism '. In many cases the first generation of owners became successful owing to one or two clever inventions which made the reputation of that firm. The Yorkshire trade, in particular, has such a character; the average-sized works employs about 200 hands and has a working capital of £20,000 to £50,000. Such firms cannot invest their total working capital in the development of one new type of machine and have not even got the resources to manufacture old-established designs efficiently. Nor are their managements ready to accept new ideas.

As a consequence most of the new ideas in the machine-tool industry by-passed this country up to 1938. Hydraulic drives, and high-speed lathes capable of taking full advantage of the superior cutting properties of tungsten carbide tools, were not a general feature of British machine-tools of the pre-war period. We have already referred to the fact that few manufacturers have been capable of developing efficient manufacturing methods such as comprehensive jigging, elimination of hand scraping by grinding, complete interchangeability of parts, or any other methods associated with mass- or semi-mass production.

As in peacetime the industry consisted mainly of small producers, each depending to a large extent on one or two patents, it is clear that there was little attempt at cooperation between them. The one exception was the *Associated British Machine-Tool Manufacturers Ltd.*, comprising some half a

dozen leading manufacturers whose association was rather a loose one, covering mainly marketing and exports; each constituent firm preserved its individuality and it is doubtful whether either the firms or the purchaser derived any considerable benefit from the Association. There was also a *Machine-Tool Manufacturers' Association* theoretically embracing the whole trade and acting as a spokesman for it, but with relatively little influence.

There were no accepted standards of accuracy for the trade, each firm developing its own 'alignment charts' for the various machines it produced; even so, not every firm had such charts and consequently many machine-tools were purchased without any known standard of accuracy.

There were, of course, makers of first-class machine-tools in this country and we must mention in this connection such firms as *Churchill Machine-Tool Co.*, *Alfred Herbert, Ltd.*, *H. Ward, Ltd.*, and a few more like them. These firms produced machines as good as any in the world within their own range—grinding machines, capstan and turret lathes, etc. They employed modern methods, developed new types and, in general, contributed to the pool of technical knowledge on machine-tools and the uses to which they might be put. The bulk of the firms, however, relied on the skill of their workers and the tradition built up in their works to turn out machines which were saleable. Not a few of them were living on reputations which, having been established many years ago, were not always justified by the quality of their present-day goods. For these firms it can be said that they lived by the elbow grease of their workmen without attempting to bring their manufacturing methods up to modern standards.

WARTIME DEVELOPMENTS

Some official information on the growth of the British machine-tool trade during the war was given in the 14th report of the Select Committee on National expenditure. According to this report, the turnover of the industry increased from £19,000,000 in 1939 to £47,000,000 in 1942, which was the peak year of production. The tooling-up of British war factories was not completed till 1943, and even in 1944 there still remained a certain demand for machine-tools to obtain more efficient and greater production, i.e., for automatics, etc. The number of people employed in the industry rose from approximately 25,000 in 1937 to approximately 85,000 in 1942.

In addition to these statistical data, we must put on record the fact that there had been some technical improvements in design, and particularly in methods of production of machine-tools, which have brought our machine-tool trade nearer to the standards of Germany and U S A. No very important developments have been possible, however, owing to the close control on new designs exercised by the Ministry of Supply through the *Machine Tool Control* (M T C). The control has not, of course, prevented the development of certain types of specialised machines, e.g., for the production of ammunition. But in the main the British engineering industry was compelled to go to America for special tools, as well as for many of its automatics and high production machines.

The Machine-tool Control was set up early in the war, and has exercised very considerable powers over the Industry, which benefited in so far as the total output of each firm was booked in advance by ('continuity') orders from M R C. Some degree of rationalisation was attempted by the Control, which meant that certain firms were not permitted to build machine-tools in which they were not as competitive as other firms. The industry has thus become rather static, but the net effect of this rationalisation has not been entirely adverse.

It is clear from the statistical figures quoted that the industry has grown very largely and has increased its manufacturing capacity, but the bulk of the increase in output has been obtained by an elaborate system of sub-contracting to firms in other, less essential, branches of engineering, such as the textile, printing, etc., machinery trades. In many cases the sub-contractors have produced the simpler types from the range of the parent firm, or the manufacturing standards have been lowered in order to enable such sub-contractors to build machine-tools of passable quality; in general it may be said that many of these sub-contracted machines are only just good enough. In addition they are more expensive than the same types produced by the parent firm, as both firms are allowed to make a profit. An anomalous position may thus be created when a particular machine is sold by the parent firm at different prices, depending where the machine is made.

In 1940 all machine-tool prices were frozen by the Control at the 1935 level plus 22.5%. Where, however, firms proved that this increase was insufficient to allow for higher production costs they were granted further increases in selling prices. The nominal increase permitted seems reasonable; especially when it is remembered that every machine-tool manufacturer has benefited greatly during the war by keeping his output as high over 100% capacity as he could, and this factor in itself should have enabled every firm to reduce its prices as compared with the pre-war ones, thus largely off-setting increased costs in wages and materials.

The executives of the Machine-Tool Control were recruited almost exclusively from the staffs of machine-tool building firms. In this respect the picture does not differ from the one obtained in other wartime Controls, and nothing has been done by the Control seriously to affect the immediate profits or prospects of the industry. Little constructive work has been done either in the way of standardisation of machines or parts thereof, or of improved production methods of design.

On the other hand, fuller advantage has been taken of recognised imrpovements, such as the use of tungsten carbide tools and of ' climb milling '. With regard to the former, Government propaganda has been used to a certain extent and advice has been given to users of machine-tools through official channels. During the periods of greatest demand, the quality of machine-tools in general was lowered by most firms, partly involuntarily and in some cases deliberately.

The profits of the industry have risen speedily during the war and many of them have thus been enabled to re-equip themselves at very favourable terms, with the new manufacturing plant and machine-tools provided by the Government. The official schemes provided for this purpose enabled firms to apply for equipment and tools and, on receiving sanction, hire them at a charge of 12½% p.a. In practice, the charge was paid out of what should have been E P T. It is more than likely that most of these hired machine-tools will be bought outright by the manufacturers on the cessation of hostilities at very favourable terms. On the other hand, they were frequently forced to accept machine-tools of American origin at prices which during the war were several times greater than those of the corresponding British-made machines.

The boom in machine-tools is now over and manufacturers, facing a much more difficult time, are inclined to lean more and more heavily upon the Machine-Tool Control.

Formerly all machine-tools were taken over by the Government as soon as they were completed. Manufacturers were allowed to make a profit only on such machines as were ' allocated ' by Machine-Tool Control to actual users, i.e., munition factories, etc. Those machines which were not allocated were put into a Government ' pool ' and paid for, but the nominal profit to the firms was not allowed. This arrangement has been altered recently in

favour of the manufacturers, who now get the standard price for the machines, whether they are allocated by Machine-Tool Control or remain in the pool.

LEASE LEND AND ITS EFFECTS

Under the lease-lend agreement this country obtained an enormous number of machine-tools from the U S A which were disposed of by the Government to the industry through the Machine-Tool Control. The machine-tools were charged for by the Machine-Tool Control at their full American prices, converted into Sterling at the ruling rate of exchange, but, of course, a considerable proportion of these lease-lend machine-tools were allocated under the ' assisted ' schemes. These machine-tools were of the greatest possible value to the British war effort; at the same time their importation placed the British machine-tool trade in a somewhat difficult position with regard to exports during the war and our own lease-lend contributions to other Allies. It would appear that the number of machine-tools which we were able to allocate for export was influenced not only by our own capacity for the production of these particular types of machines, but also by a certain measure of control exercised by the Americans. This is understandable, as otherwise we would have been obtaining machines gratis from America and would be supplying unlimited quantities to the U S S R, etc., thus preventing the Americans from obtaining their fair share of this trade.

A further adverse effect of lease-lend imports from America was that no impetus was given to the British trade to produce certain new types of machines, which we would have been forced to design and produce failing such an agreement. Thus, technically, lease-lend in machine-tools was of no assistance to the Machine-tool trade.

POSTWAR PROSPECTS

The manufacturers are somewhat pessimistic about their post-war prospects; some of them believe that the home market is saturated with machine-tools, others that stocks of Government-owned machine-tools from the ' pool ', the shadow factories and various engineering works will flood the market immediately after the war. Yet many of the machine tools now in operation are obsolete or worn out. If the British engineering industry is to remain as efficient after the war as it is now, it will have to re-equip itself with some of the remaining surplus machinery. Many more could be utilised in the rehabilitation of the invaded allied countries. As these become liberated they will almost at once require machine-tools to re-start industries in order to prevent unemployment. Furthermore, many areas, such as India, Brazil, the Near East and others, have entered upon an era of industrialisation and will require vast quantities of machine tools of which they were starved during the war; the immediate wants of these countries could be supplied to a large extent from the British and American Government-owned surpluses and pools at any convenient time.

A fair estimate of British domestic post-war machine-tool requirements is £8–10 million annually for three to five years (at 1945 prices). This would keep the industry engaged to the extent of fifty to sixty per cent. of its present capacity (excluding the capacity of sub-contractors who, in any case, would be engaged in their legitimate trades).

. . The prospects of the export trade will largely depend on political decisions, such as the extent of British Government loans to certain allied nations, agreements with the U S A on Lease-Lend materials; also on the extent of German reparations in kind, the physical state of the German machine-tool trade on the cessation of hostilities (and particularly of aerial warfare) and the competition of the American machine-tool trade.

ANTICIPATED WORLD MACHINE-TOOL TRADE FOR FIRST POST-WAR YEAR AT 1945 PRICES (£'000) (NEGLECTING THE GERMAN TRADE)

To	From				
	USA	UK	Switzer-land	Other Countries	TOTAL
USSR	8,000	3,000	300	200	11,500
France	1,500	750	150	100	2,500
Netherlands and DEI	1,250	700	50	—	2,000
Belgium	500	400	50	50	1,000
UK	300	—	100	100	500
Italy..	400	150	50	50	650
Poland	400	500	50	50	1,000
Czechoslovakia ..	500	400	50	150	1,100
Scandinavia ..	500	450	50	—	1,000
Balkans (incl. Roumania)	500	650	50	—	1,200
Near East ..	500	300	—	—	800
Asia (Rest) ..	800	350	50	50	1,250
Australia	300	200	50	—	550
Africa	200	150	—	—	350
South America ..	1,350	—	—	—	1,350
	17,000	8,000	1,000	750	26,507

This Table has been drawn up on the assumption that there will be a small, in fact, negligible amount of German exports (including both reparations and normal trade). This table allocates exports of £8 million to the United Kingdom. Alongside domestic trade previously estimated this volume of exports would keep the British trade fully employed for the first few post-war years. That this figure is not unreasonable is indicated by the recently published export figures for the years 1938–43; these show that in each of the years 1938, 1939 and 1942 the British machine-tool trade was able to export approximately £4.5 million.

As pointed out in an earlier chapter, the U S A machine-tool industry, having reached a peak output of $1,360 million in 1943, has since contracted by nearly 75%. The 1944 output is estimated to run only to $325 million. The reduction was mainly at the expense of sub-contracted work, but even so many legitimate machine-tool builders in the States are now partly engaged on munition production and only partly occupied in producing machine-tools. On the other hand, there seems to be very much less control over the technical development of machine-tools in the U S A than there is here. Consequently many firms have achieved great improvements in the design and quality of their products.

The very large outputs registered in 1942 and 1943 have enabled the American trade to write off jigs, fixtures and a large proportion of other plant, so that after the war they will stand as very powerful competitors for world markets.

Little is known about the German machine-tool trade during the war, but there has been no indication that Germany has been short of machine-tools during this period. In all probability the vast German machine-tool industry has been extended to the level necessary to cater for all her wartime requirements.

We have already outlined in the previous chapter that the British trade was able largely to re-equip itself, to write-off the cost of jigs and fixtures, and, in

many cases, of extensions to buildings during the present war. This should enable it to produce more economically after the war, and obviously this improvement in the financial position of the trade has been paid for by the Government in the long run. We have also shown, however, that owing to the freezing of designs it is likely that many of the machine-tools produced before and during the war will be virtually obsolete technically in the post-war period, and if new types will be designed immediately after the war, new jigs and fixtures, etc., will have to be built by the manufacturers thus off-setting to a very large extent the benefits derived during the war.

The extent to which the individual firms will have either benefited or lost owing to the war will vary largely; some firms will have gained considerable advantages, others will have actually made small sacrifices. They will all share one advantage, however—they have learnt how to increase output—and this has a beneficial effect on factory costs.

If, therefore, the machine-tool trade is to have a market for its product it will be able to reap a considerable advantage from an upward trade trend, which it might have been unable to utilise fully in the pre-war era.

The Table shows the potentialities that might be open to British machine-tool manufacturers in the export field, assuming that Germany will not remain a competitor. It will be noted that it is further assumed that the British exports in the post-war period could be raised four times as compared with 1937. It is suggested that U S S R will take £3,000,000 worth of British machine-tools, which is fifteen times the normal British sales to Russia. This anticipated market will only be possible, however, if the trade and the Government show sufficient flexibility in their trade negotiations with the U S S R.

In the case of other countries, it is assumed that they will have a large demand for machine-tools for several years after the war as part of their rehabilitation programme.

RECOMMENDATIONS

It should be clear from this report that the main shortcomings of the British machine-tool trade are: the lack of cooperation between individual firms, lack of standardisation, absence of any serious research work and the uneconomical size of the factories.

The following recommendations are, therefore, made:

(1) A National Machine-Tool Laboratory should be founded; for this purpose one of the shadow or Royal Ordnance Factories could be used with advantages. Such a laboratory would employ about 2,000 people and would then compare in size with the corresponding Russian body (Enims). In cooperation with the British Standards Institution the Laboratory would issue standard specifications for components and parts of machine-tools and also national Standard Alignment Charts for machine-tools.

The primary object of this laboratory should be standardisation, development and research into materials, bearings, cutting methods, drives (including hydraulic and electronic drives), development of administrative and inspection methods, such as motion study, quality control methods, etc. In addition, the laboratory should have under its care a large tool room, Operatives' School and should supersede the Engineering Department of the National Physical Laboratory which is concerned principally with metrology.

In connection with metrological research, a school for inspectors should be founded and new methods of measurement and inspection developed. The design of special machinery should be undertaken on behalf of the Government—this would be of extreme value in cases of military emergency. The laboratory could further serve as

the Headquarters of an envisaged Royal Corps of Ordnance Constructors which could act in a parallel manner to the Royal Corps of Naval Constructors. (Up to the present time there is no recognised body of engineers capable of designing engines of war.)

(2) Attached to the Laboratory there should also be schools for Tool Makers, Tool Setters, Fitters, Designers and Foremen, Parallel with this, Chairs of Production Engineering should be formed at least at three Universities; Leeds, Manchester and Birmingham. The Leeds University Chair could conveniently be located at Halifax where a Machine-Tool College should be established.

(3) If Government control is to be exercised over the industry, this must not be on the bureaucratic lines of the present Machine-Tool Control of the Ministry of Supply, but on the lines of technological and administrative rationalisation. For this purpose the creation of a National Machine-Tool Corporation is suggested, i.e., a public corporation. This should have powers for compulsory standardisation, amalgamations of firms into regional groups, and finally into one Corporation with possibly three or four constituent regional firms, all of them eventually owned by the nation.

At the present time approximately 100 firms are engaged on machine-tool building; of these only 20 or so are of any real consequence. The total nominal capital of these major machine-tool companies is approximately £5,000,000.

THE MACHINE-TOOL INDUSTRY AS A NUCLEUS FOR NEW TRADES

Some mention has been made already of the great educational value of the machine-tool trade.

The general trend in industry is towards the concentration of skill in the hands of the few, so that operators for production operations need only have the minimum skill required for efficient quality production.

It is difficult to convey properly the influence which a large machine-tool firm with a comprehensive range of products can have on the engineering industry of a district. The following example, however, is illustrative. *Messrs. A. Herbert, Ltd.*, of Coventry, probably the only British firm which combines large size with a very wide range of tools, has supplied the whole of the very important local precision engineering trade with many of its technicians.

By the nature of things, tool makers, etc., are best of all trained in machine-tool firms and for a long-range policy of rehabilitation in a depressed area, we would therefore, recommend the foundation in that area of at least one sizeable machine-tool works.

Assuming, however, that youth can obtain good secondary and technical education, then such firms will depend to a large extent on trained personnel in machine-tool factories, in order to ensure good design, good workmanship and efficient shop operation. They would provide lucrative employment for the intelligent and trained local population and would produce export articles of high specific value, which did not require expensive imported raw materials. The influence of such exports on the national budget would be very considerable, particularly since many of these fine-mechanical products were also imported on a large scale before the war.

Whereas the normal labour force of the British machine-tool trade was about 20,000, we visualise it employing some 50,000 after the war.[1] Should there be an expansion in the sense outlined in the previous paragraph, then we can add to this expanded employment a further 20,000 people for the fine-mechanical trades. Moreover we estimate that the value of total annual output can be raised from its pre-war level of £7 million to £15 million.

[1] During the peak war production period it employed some 100,000 people.

BOOK REVIEWS

A PLANNED ECONOMY OR FREE ENTERPRISE by E. Lipson (A. and C. Black 15/-)

The arguments of almost all critiques of the present economic order in Britain are based on the conditions of a capitalist economy. The history of pre-capitalist Britain has been distorted often by the prejudices of the classical economists of the nineteenth century. It was easy for the orthodox historian to assume that a positive state plan is an entirely new development in economic policy.

Mr. Lipson sets out to show that Britain had a planned economy (defined as ' central direction of the national resources ') before the age of free enterprise, and that the problems and experience of the mercantilists are important to the study of free enterprise in decline, and to the formulation of a reconstruction policy.

The first chapters contain a brilliant exposition of economic conditions and policy in Britain before and after the Civil War, and the growth of capitalist industry is traced far back beyond the days of its political power. The gradual decline of free enterprise, culminating in the chaos of the inter-war period and the repudiation of *laisser faire* policy is described in the shorter second section, in which rather more attention is paid to the financial policy of the 1920s and '30s than to the changes in economic policy in general. The last section shows some of the economic problems of reconstruction, but there is disappointingly little constructive discussion of them, in the light of the earlier analysis. However, the first part of this book is itself a valuable contribution to clear-thinking on a policy for post-war reconstruction. J.M.

MANAGEMENT AND MEN by G. S. Walpole (Cape 7/6)

A very interesting study by the Chairman and Managing Director of a fairly large Engineering firm of the principles underlying Joint Production Councils and their practice in one Company. Very critical of employers in the past. Recognises frustration as the industrial disease of the age, but omits poverty as one of the causes of frustration. Respects the solidarity and loyalty of Trade Union Members and believes that the majority of workers are more interested in the social purposes of industry than in obtaining special status or rewards for themselves. The author believes, therefore, in the necessity of a common interest, to be shared by all partners in industry, but as is usual with writers on the management or employer's side, believes that the question of ownership is irrelevant. On this, the author's attitude is demonstrated by his belief that industrial problems should, like foreign policy, be outside the scope of politics. Contains also a suggestion for a hierarchy of councils under a National Joint Industrial Council : such council, however, only to be advisory to Government on industrial problems. Far in advance in understanding and conception of most books on this subject. A. A.

SECRETS OF INDUSTRY by Lewis C. Ord (Allen and Unwin 8/6)

The author states he is no writer and had no desire to write this book. The result is an uncorrelated series of observations on industry in the U S A, Great Britain and Europe. A consulting engineer of experience, he is a firm believer in private enterprise and American mass production in particular, and is very critical of British Industry. He assigns the main causes of its low efficiency compared with that of the United States to (1) excessive ratio of non-productive to productive workers ; (2) too great a variety and too small an output of products ; (3) lack of effort by workers due to bad industrial leadership. Expresses a great belief in the practical man ' and is extremely naïve on social and economic problems. Contains many interesting snippets of information. A. A.

ADULT EDUCATION FOR DEMOCRACY by Harold C. Shearman (Workers' Educational Association 3/6)

An incisive and useful brief study, by the Education Officer of the W E A, of the present position and problems of Adult Education. It makes the much-needed point that adult education, however valuable, cannot be a substitute for the improvement of general education in the community as a whole, but that the nature of the spontaneous demand by adults will inevitably reflect the

omissions of their own childhood training and the maladjustments of the world around them. Anyone who has followed, over twenty or thirty years, the changes in demand from economics to psychology and thence to ' reconstruction ' and economics again, will know exactly what this means. There is also a brief but excellent page or two defining clearly the difference between adult education, by whomsoever provided, and ' State-controlled information services ', which should be read by all persons in a muddle ; and in general, the booklet can be strongly recommended.

M. I. C.

BRITAIN'S COAL by Margot Heinemann (Gollancz)

When the recent White Paper on Britain's war effort was published, figures of coal production and consumption were not included, since they had been published separately. That separation has helped to cover up one of the blackest spots in the building of the British part of the Allied war offensive. Coal has so far been forthcoming in sufficient quantities to meet the growing needs for power for war factories, and to keep up fuel supplies to civilians without serious, widespread hardship. However there has been practically no severely—or even normally—cold winter weather since the coal crisis became acute in the Spring of 1942, and this good luck has probably done more to postpone the full impact of the long-pending coal famine than any other of the many cure-alls. Even this meagre achievement has been made at the expense of our export trade, which has dwindled to less than one sixth of its inadequate pre-war quantity. The periodic bickering between owners, Government and miners in Parliament and in the Press has kept the country in mind of the deplorable state of one of its basic industries, without bringing an effective remedy to light.

In these circumstances, Miss Heinemann's book on the coal industry's recent history makes a very valuable contribution to an eventual solution. Here is the background to the miners' claim for the nationalisation of the mining industry, and to the support of that policy given by the Labour Party Conference. Relations between miners and owners have not become intolerably bad, nor has the nationalisation of the mines become so much ' in the air ' without good cause. The cause lies in the life of miners and their families between the wars, and that life is described and analysed in vivid detail in ' Britain's Coal '. No technically adequate plan for the reorganisation of the industry can be effective unless it makes due allowance for the peculiar evils and difficulties of mining areas ; and it is fitting that a book at once entertainingly readable and authentic, as Will Lawther testifies in his preface, should be published when the needs of liberated Europe, and an imminent General Election are inexorably bringing nearer a real attempt to drag the coal industry back from ruin.

SOCIAL SECURITY : PRINCIPLES (International Labour Office, Montreal)

This document, submitted to the International Labour Conference in April 1944, discusses the principles on which schemes of Income Security and Medical Care should be based, and contains proposed Recommendations for international consideration. Students of Social Insurance will find here a convenient standard for assessing the relative merits of particular schemes. By this touchstone the British Government's recent proposals command respect. They differ from the I L O recommendations, however, in two important respects. The British Government recommend flat-rate contributions and benefits, where as the I L O principle is that both should be related to earnings. Again, the I L O. appear to contemplate that Social Assistance (as distinct from Insurance) should be reserved in the main for children's allowances and for persons not qualified for the insurance benefits. Under the British scheme subsistence benefits are not provided, with the result that many citizens will require the Insurance allowances to be supplemented by Assistance.

A. F.

THE ROCHDALE PIONEERS by W. Henry Brown (Rochdale Equitable Pioneers' Society)

This book was prepared primarily for distribution among the local members of the ' Rochdale Equitable Pioneers' Society ' whose centenary has been

celebrated by cooperators throughout the world during 1944. The author, W. Henry Brown, has written a number of similar local histories, and his association with many early cooperators enables him to relate numerous reminiscences, The material is presented rather haphazardly, and although it contains useful information to those closely associated with the Cooperative Movement, the quality of the writing does not reach the standard looked for in publications recommended by the Fabian Society.

M. G.

A PRINTER AND HIS WORLD Andrew J. Corrigan (Faber 12/6)
Rather surprisingly in view of its vast importance, the trade and craft of printing seldom finds a place in publishers' catalogues. Mr Corrigan has been splashed with printer's ink since childhood, and he writes with inside knowledge of a printery in Dublin during the stormy years 1890–1916. Fabians will find much to appreciate in his political and social philosophy, but it is to be hoped that they may also profit from his lucid account of the point system in typography and come to share his horror of what has passed for good printing in the not so long ago.

E. R. P.

LAST ESSAYS by J. A. Spender (Cassell 8/6)
The charm of this collection of a score of essays can be epitomised by taking one: " From the Old Rural System to the New '. Here, in a simple, lucid style all the more effective because he does not strive for effect, the author outlines the means by which the common holdings of England were enclosed and the results, good and evil, that resulted therefrom. A condensed light is thrown on an obscure and often misunderstood but vital page of our social history by an intellect whose brilliance is reflected throughout this book, which ranges from Mr Gladstone to Neville Chamberlain, and from liberty to ' Seven Days Hard '

E. P.

THE ECONOMIC LESSONS OF THE 1930s by H. W. Arndt (O U P 12/6)
Issued under the auspices of the Royal Institute of International Affairs, with whose Economic Group Mr Arndt worked in drafting this report, this study performs the valuable task of assembling the raw materials on which any assessment of the pre-war economics of the Great Powers must be based, and combines the customary careful accuracy of the Chatham House reports with a greater liveliness of opinion than is customary in group-prepared reports. It is to be hoped that Chatham House will repeat the experiment of publishing reports under the name of individuals. Three-quarters of the book describes the economic position of the Great Powers (including Sweden but excluding the U S S R except for short references) and their domestic and international economic recovery policies. This description is a well-arranged and up-to-date record of the facts, which hitherto were only obtainable after searching through the League economic surveys and a number of monographs. The last quarter of the report emphasises unemployment and international monetary disequilibrium as the root causes of the chaotic economics of the 1930s, and draws the morals that adequate public investment is capable of conquering unemployment, and that the Powers must accept a permanent international monetary discipline.

D. M. S.

GERMANY BETWEEN TWO WARS: A STUDY OF PROPAGANDA AND WAR-GUILT by Lindley Fraser (Oxford University Press 8/6)
This is the English version of a book written by the German News Commentator in the European Service of the BBC, for the benefit of the population in any occupied parts of Germany. An objective account of the inter-war period might indeed have been extremely useful for convincing Germans of the righteousness of the Allied cause. Professor Fraser, however, has the attitude of a Public Prosecutor, stating the case of the victorious democracies and refuting the main propaganda lies of German nationalists. A man who calls himself a specialist on propaganda should know of a better psychological approach to his readers.